



# Laboratory Procedures for Complete Dentures

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- ▶ Primary Cast
- ▶ Custom Tray Fabrication
- ▶ Beading/Boxing of Secondary Impression
- ▶ Master Cast
- ▶ Denture Base Fabrication
- ▶ Occlusal Rim Fabrication
- ▶ Articulation
- ▶ Teeth Setup
- ▶ Investing the trial dentures
- ▶ Curing
- ▶ Trimming/Finishing and Polishing

# Denture Processing

## Steps

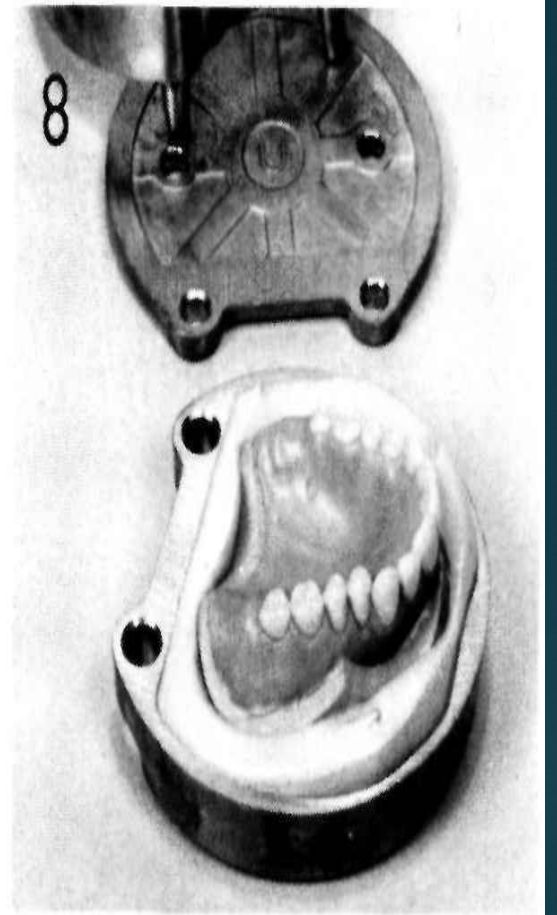
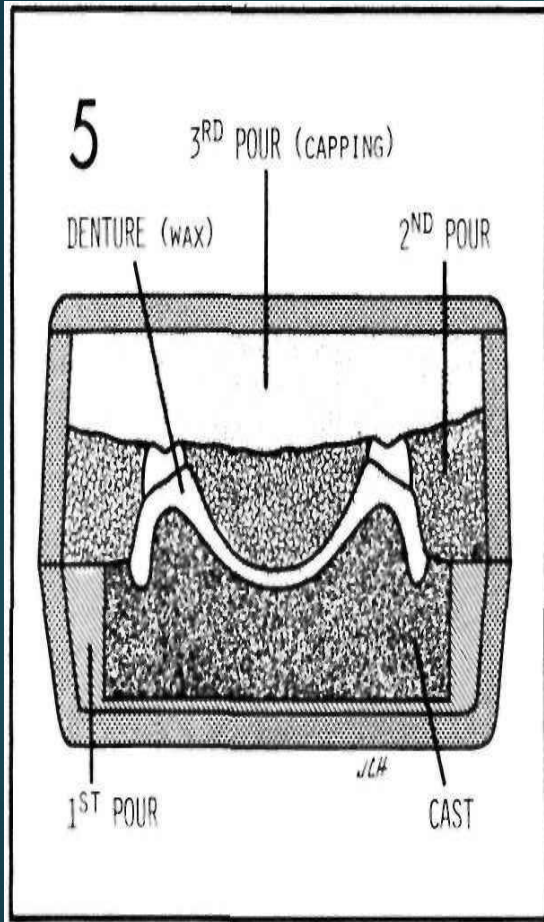
- ▶ Investing
- ▶ Dewaxing
- ▶ Packing of acrylic resin
- ▶ Curing
- ▶ Devesting
- ▶ Trimming
- ▶ Finishing
- ▶ Polishing

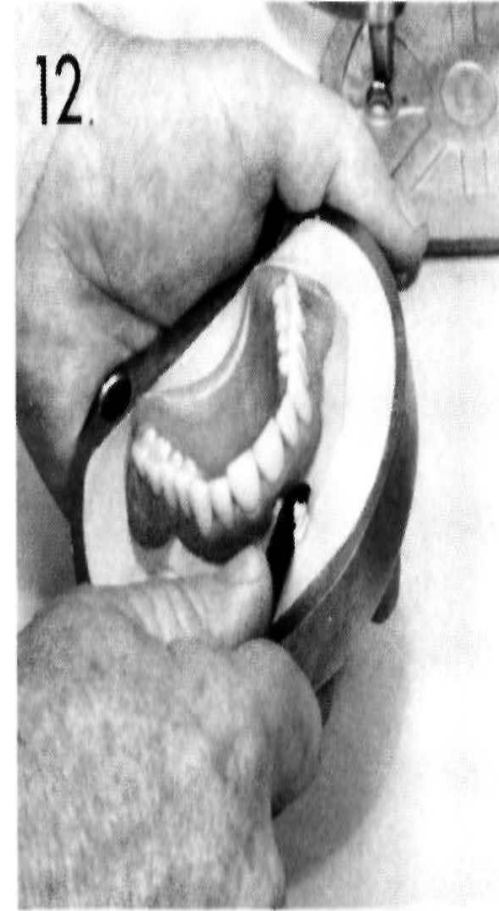
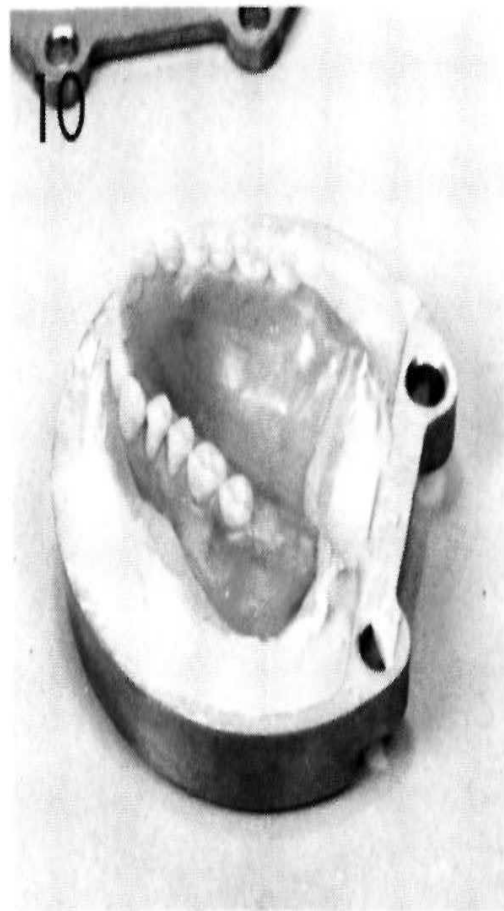
# Sealing

- ▶ Sealing of cast with wax to prevent plaster from getting under the base

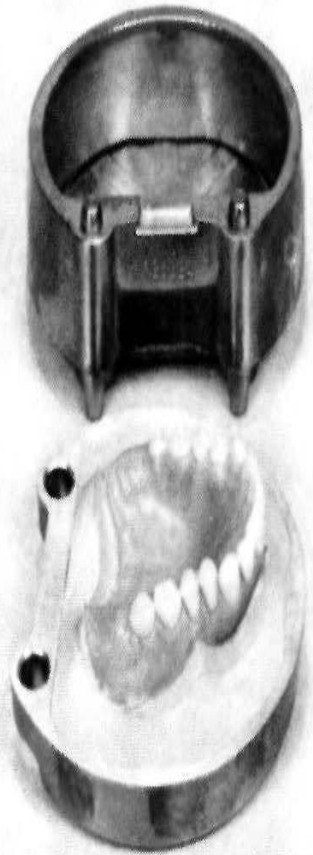


# Investing

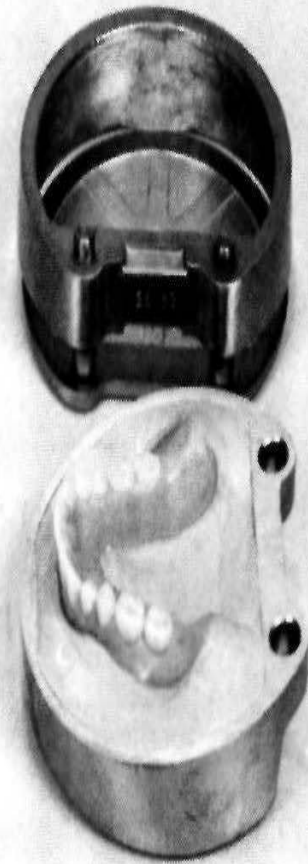




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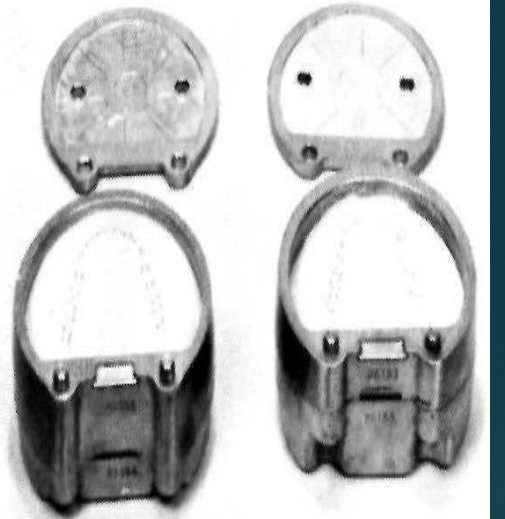
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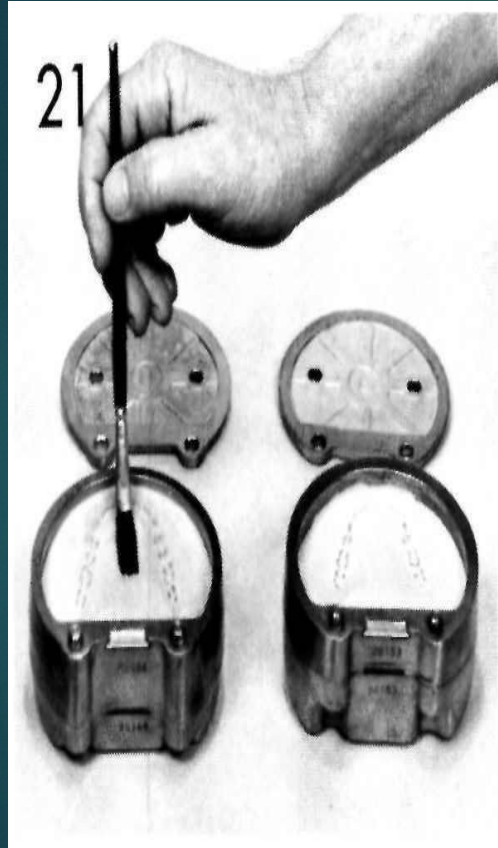


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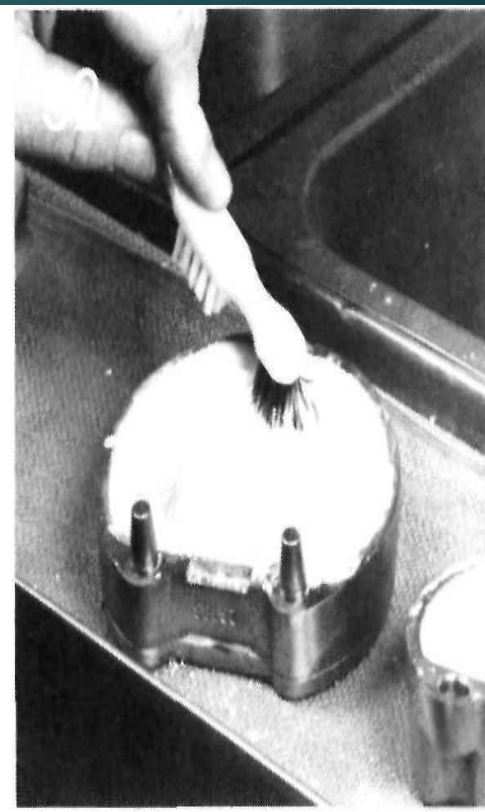




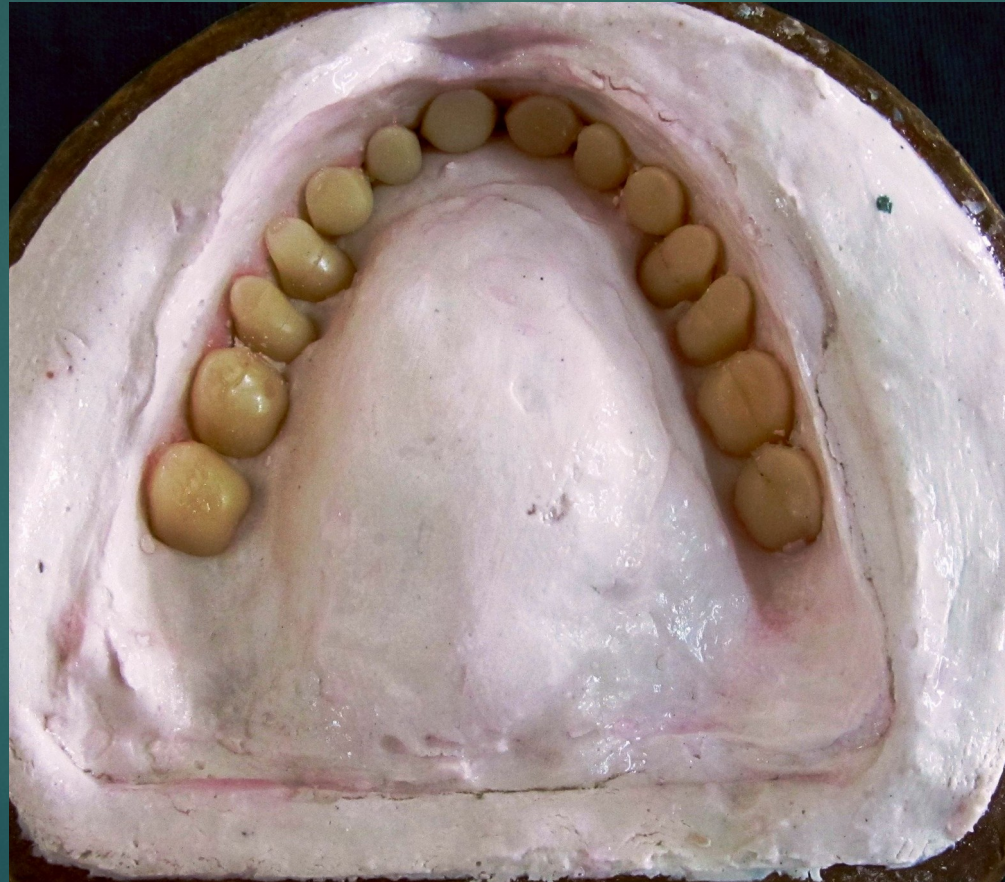
# Dewaxing



# Dewaxing



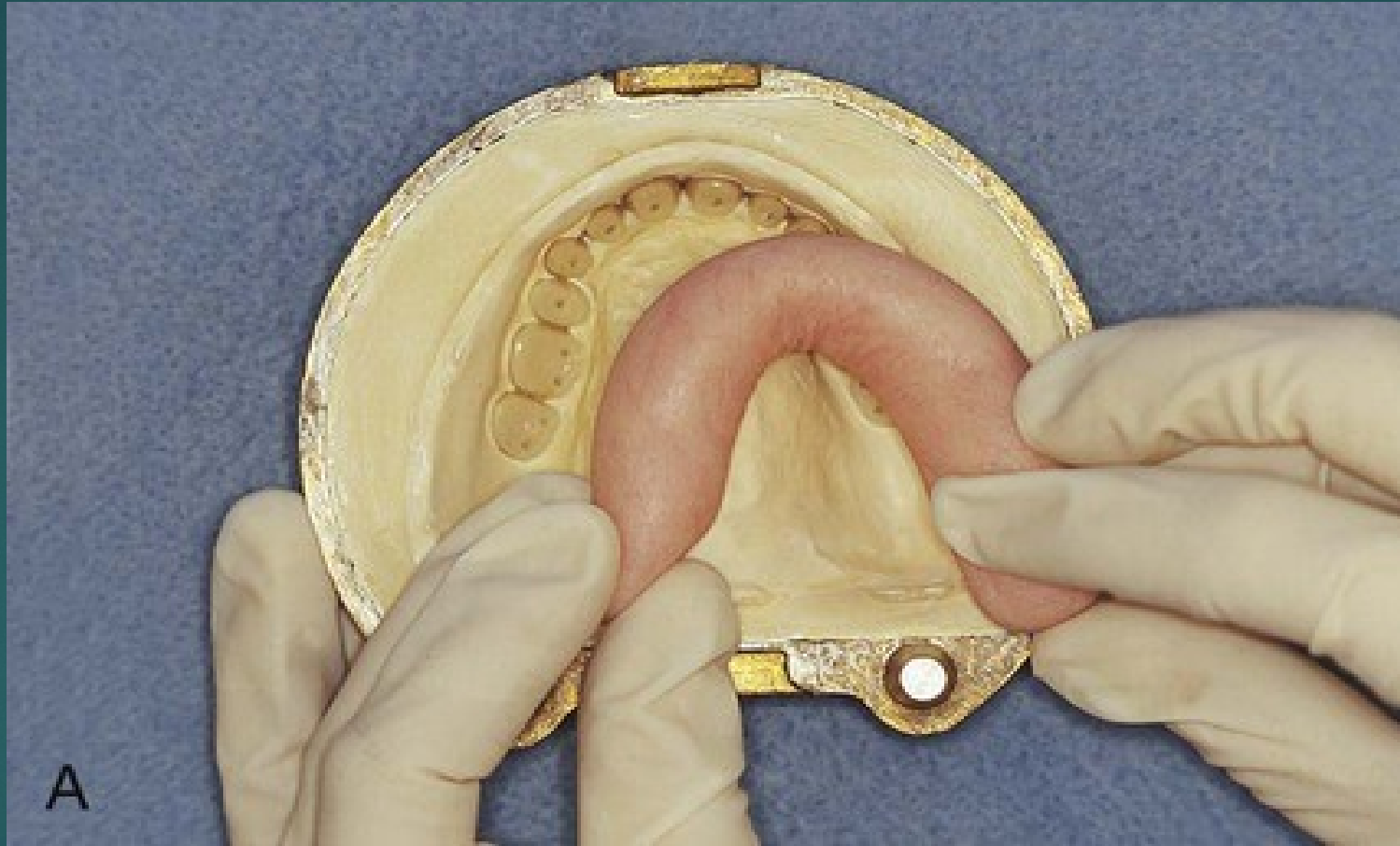
# Dewaxing



# Application of Separating Media

- ▶ Tin foil
- ▶ Cellulose lacquers
- ▶ Solution of alginated compounds
- ▶ Calcium oleate
- ▶ Soft soaps
- ▶ Sodium silicate
- ▶ Starches
- ▶ Most commonly used separating medium is sodium alginate solution which is also called as cold mould seal

# Packing



# Remove excess flash



# Curing of Dentures

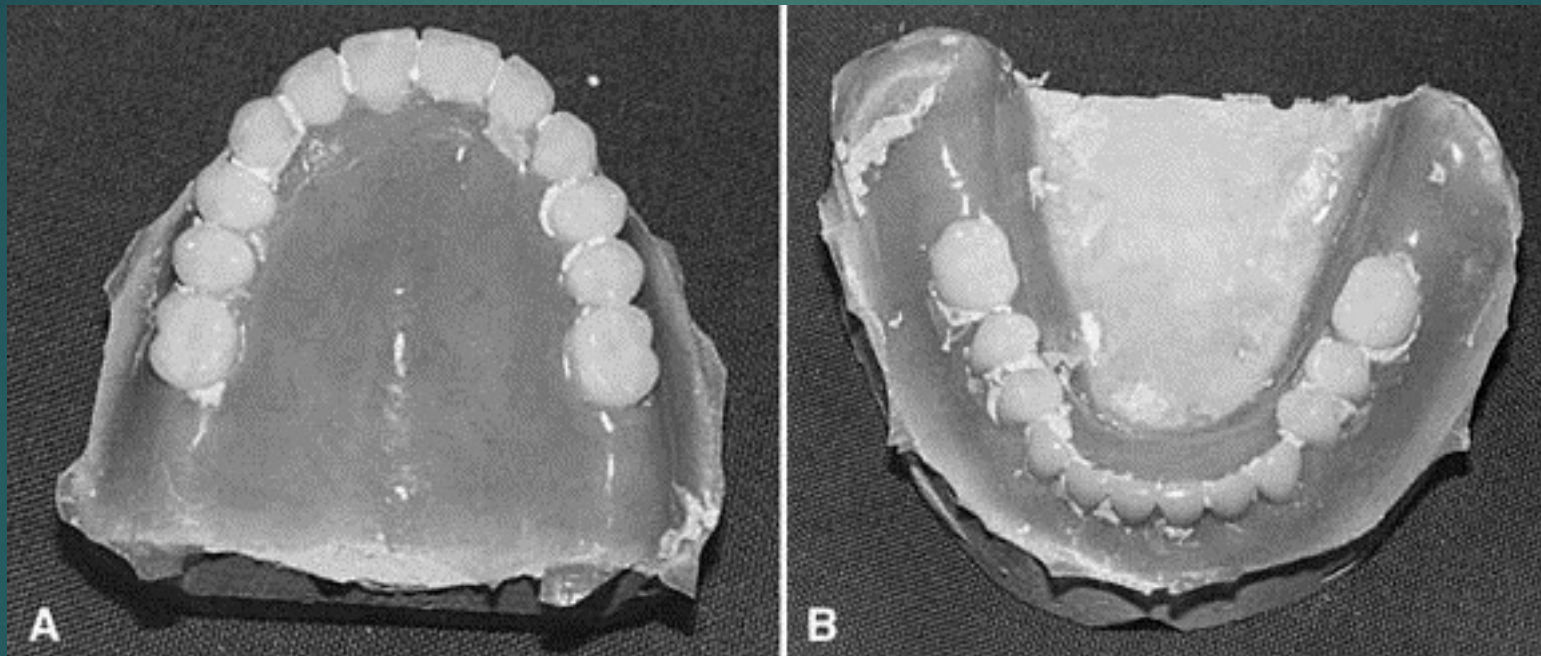
## Short Curing Cycle

- ▶ Processing at 74°C for 2 hours with terminal boil at 100°C for one hour

## Long Curing Cycle

- ▶ Processing at 74°C for 8 hours with no terminal boil
- ▶ Processing at 74°C for 8 hours with terminal boil at 100°C

# Deflasking & retrieval

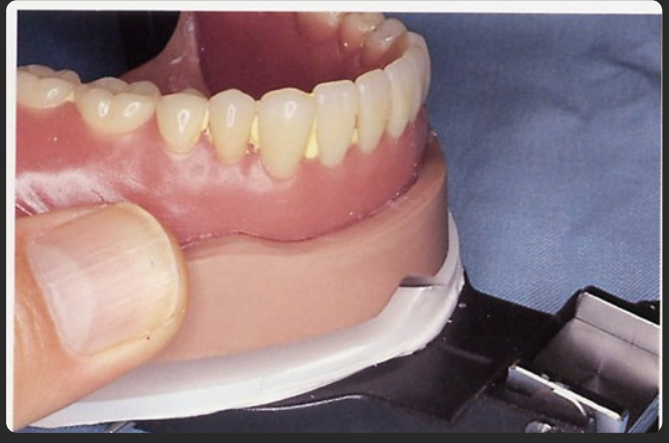


# LAB REMOUNT PROCEDURE

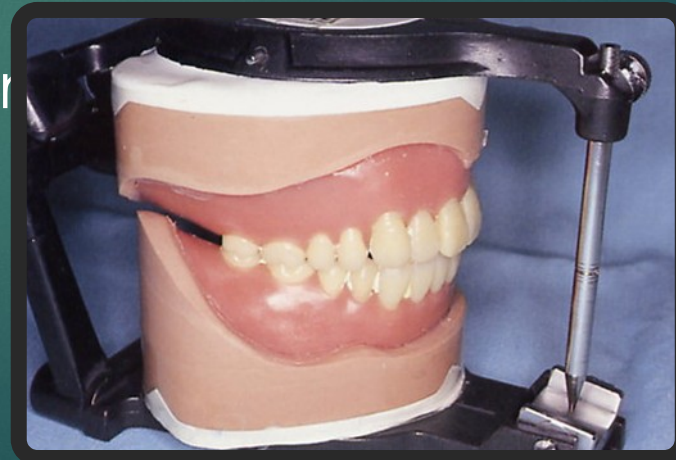
1. Remount the denture with cast on articulator using original plaster index attached with mounting rings of articulator.

2. Programme articulator in centric relation position

- 3.



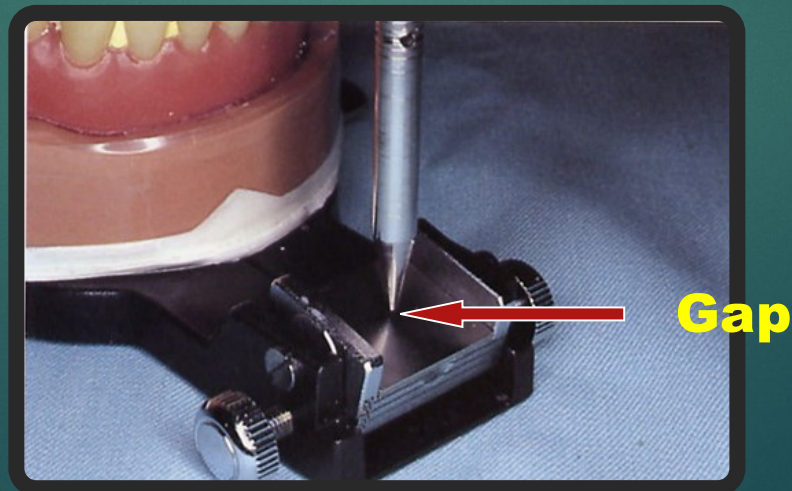
incisal pin



ble.

**Separation of incisal pin if less than 2mm,  
laboratory remount to be carried out for  
eliminating occlusal disharmony.**

**If the gap is more than 2mm better repeat the  
dentures.**



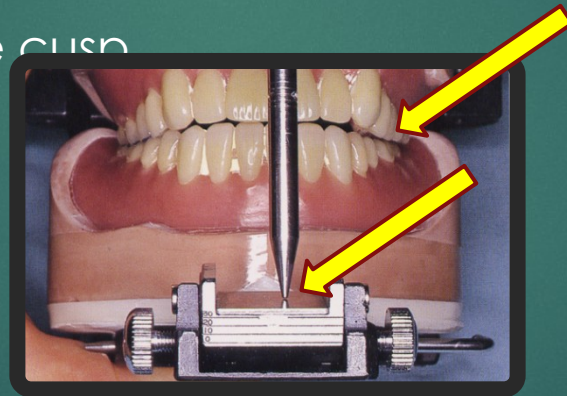
# Correction done by selective grinding procedure (Negative Coronoplasty)

a. Point is on masticatory cusp tip :

-Deepen and widen its corresponding fossa **(PLUNGER CUSP LAW)** .

b. Non working side contact (Masticatory cusp) on balancing side

- Premature contact during eccentric relation if noticed on masticatory cusp –  
then modify the cusp



-Repeat till the “multiple centric contact ” developed .  
“Incisal pin contacts incisal guide table ”.

## c. Eliminating high points in eccentric relation:

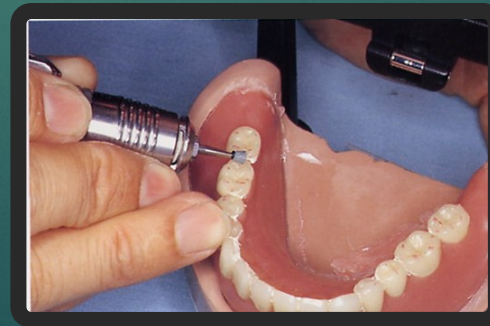
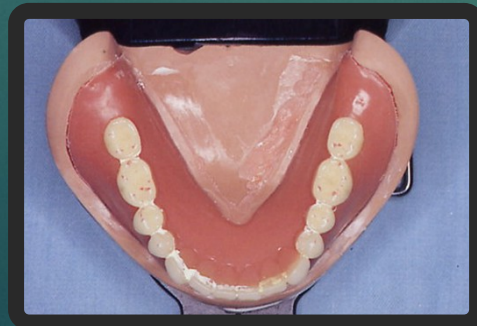
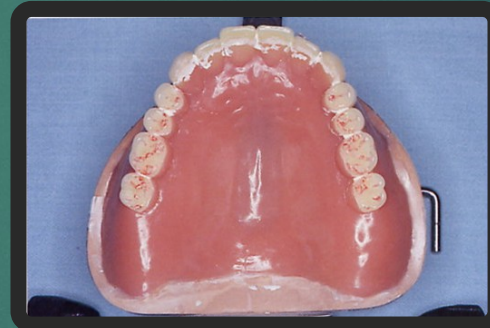
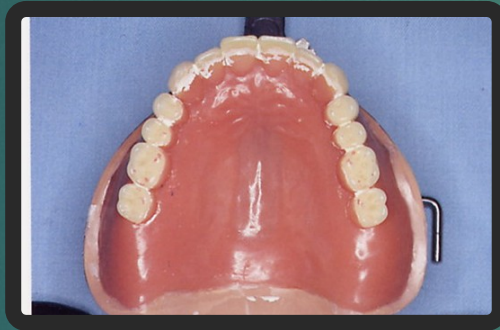
1). Lateral relation:

-Follow “**BULLS LAW**”

– grinding occlusal inner inclines of buccal of upper & lingual of lower cusp .

- **Never modify mesiopalatal cusp of maxillary second molar .**

Premature incisal contact – palatal aspect of upper or labial edge/ aspect of lower incisors



# Finishing & polishing



- Finish borders with an acrylic bur. Remove excess resin beyond the land. Be careful to preserve the border width and contour.
- Remove all plaster or stone.
- Smooth the denture bases to the proper contour with your acrylic burs.



- Use a wet rag wheel with lots of wet pumice to polish the palatal, lingual, labial and buccal areas.
- The periphery of the denture must also be carefully polished. Do not overpolish and thereby loose the contours that were developed during festooning.



Thank You